Yukon Influenza Surveillance Report

Influenza Season: 2009-2010

Summary Report

FluWatch Weeks 29-32 (July 18 – Aug 14, 2010)

***All data are provisional and subject to change as information is received.

prepared by Yukon Communicable Disease Control Program, September 3, 2010

FluWatch Weeks 29-32
Newsletter 17

THIS ISSUE:

Laboratory Reports	2
WGH Emergency Visits	2
Influenza Assessment Clinic	3
Community Health Centre's	3
Sentinel physicians/sites Antiviral	4
Prescriptions/Dispensing	4
HealthLink 811	5
Outbreaks	5
Schools	5
Immunization Adverse Events Following	6
Immunization	6
FluWatch	7
Antigenic Characterization	8
Geographic update	9
Pandemic H1N1 Influenza Web Sites	10
Acronyms	10
Yukon Map	10
YCCD Information	10

Report Highlights

This surveillance report, produced by YCDC, summarizes influenza activity in the Yukon for the 2009-2010 season, during weeks 29-32 (July 18 – Aug 14, 2010).

2009-2010 FluWatch Weeks Calendar: http://www.phac-aspc.gc.ca/fluwatch/09-10/09-10cal-eng.php

During weeks 29-32, surveillance indicators continue to demonstrate low to no levels of influenza activity.

Pandemic H1N1 (pH1N1) Severe Outcomes

Hospitalizations

There have been no hospitalizations since week 46 (Nov 15 - Nov 21, 2009).
Since October 20th, there have been 15 pH1N1 Yukon residents admitted to hospital. Among hospitalized cases 12 of the 15 had at least one risk factor for influenza complications. 3 out of 15 hospitalized cases have been admitted to ICU.

Deaths

There have been no deaths reported since week 46 (Nov 15 - Nov 21).
Yukon has had three deaths where pH1N1 was detected; pH1N1 played a direct role in the death in two of the three individuals. The first death occurred during week 44, in a female child with underlying health conditions. The second death occurred during week 46 in an adult female, underlying health conditions were not present. A third death was announced December 9th, 2009. The death occurred in an infant who died early November; however, pH1N1 infection is thought to be coincidental and not a contributing factor in the death. A complete coroner's investigation is pending.
Link to Yukon Health and Social Services Release: http://www.hss.gov.yk.ca/news/id_213/

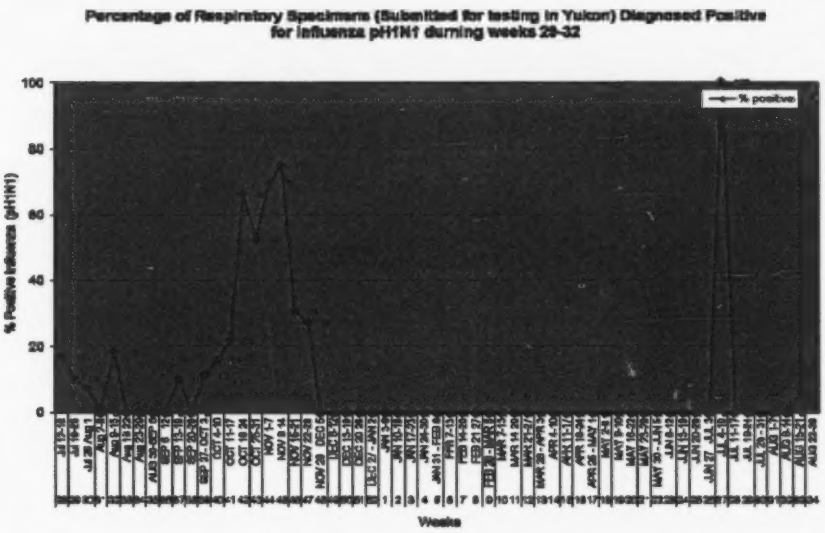
FluWatch Reporting

Based on FluWatch activity level definitions, Yukon has reported the following activity levels:
FluWatch activity level definition: http://www.phac-aspc.gc.ca/fluwatch/09-10/def09-10-eng.php

Weeks 29-32	No activity: no laboratory-confirmed influenza detections during the past four weeks, however, sporadically occurring ILI may be reported

Laboratory Reports

Since week 47, one positive influenza result was identified from week 27.

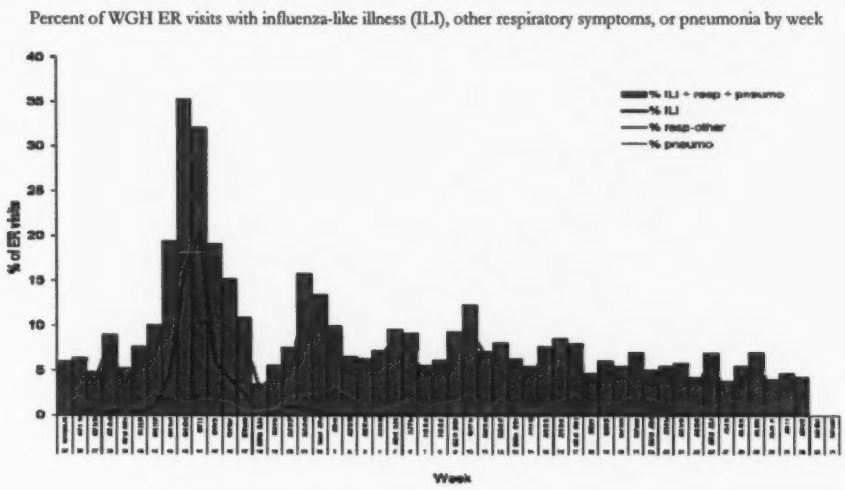

Percentage of Respiratory Specimens (Submitted for testing in Yukon) Diagnosed Positive for Influenza pH1N1 during weeks 29-32
% positive
% Positive Influenza (pH1N1)
Weeks

Communities with Laboratory Confirmed pH1N1

Cumulative laboratory information indicates that since April, 2009 Whitehorse and 9 out of 13 surrounding communities have had confirmed pH1N1 case reports.

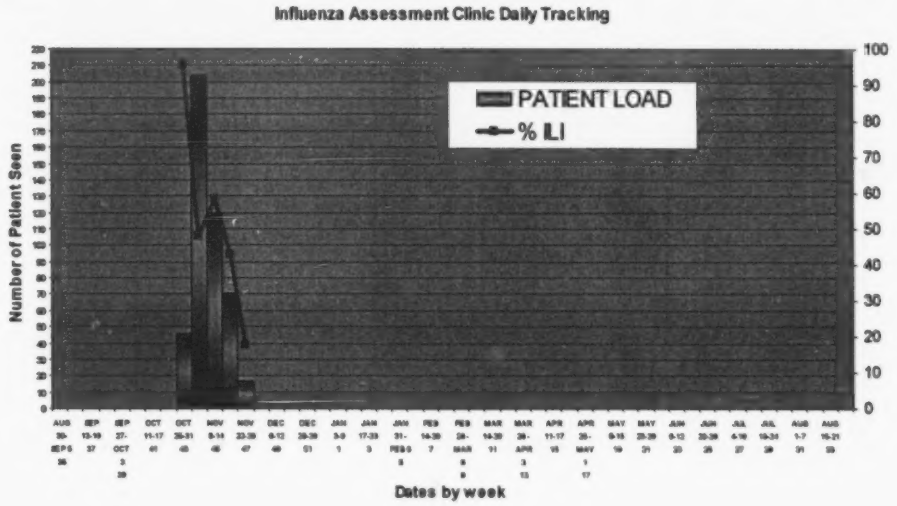
Whitehorse General Hospital Emergency Visits

During weeks 29-32 the proportion of presentations to the WGH emergency department for respiratory symptoms identified as ILI has remained low.


Percent of WGH ER visits with influenza-like illness (ILI), other respiratory symptoms, or pneumonia by week
% ILI + resp + pneumo
% ILI
% resp-other
% pneumo
% of ER visits
Week

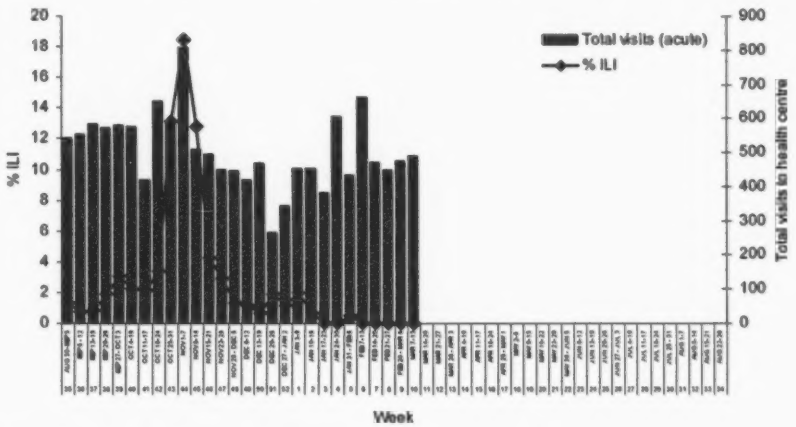
Influenza Assessment Clinic

This downtown Whitehorse clinic opened its doors on October 30th, 2009. The following graph depicts patient volume from October 30th to November 27, 2009. The clinic's last day of operation was November 27th, 2009.



Community Health Centres

Influenza-related visits to Community Health Centres (rural Yukon) increased substantially during weeks 42-44 while decreasing activity was seen from week 45 on. From week 48 on, the proportion of ILI related visits have returned to similar levels experienced in week 42 and earlier. (YCDC Data entry ongoing)

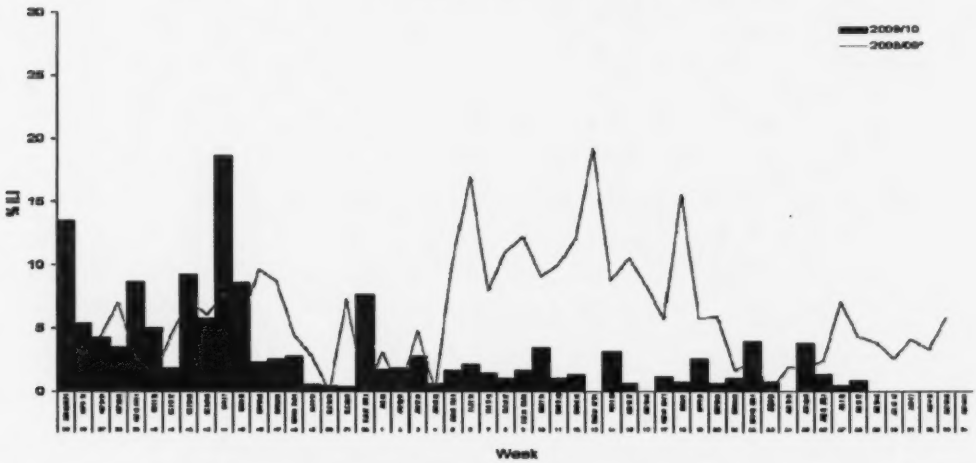


*Data provided from Community Nursing

Sentinel physicians/sites

During weeks 29-32 there were no visits made for ILI to sentinel physicians or Community Health Centres. During the 2008/09 season, an average of five sentinel reports were received each week. A new recruitment of sentinel physicians and sites occurred in July 2009. There are presently 18 sentinel physicians/sites across the territory; during weeks 29-32 an average 47% of sentinels reported. Yukon's sentinel surveillance system is comprised of all Community Health Centre's and participating physicians. (FluWatch Sentinel Surveillance Information http://www.phac-aspc.gc.ca/fluwatch/sent-eng.php)

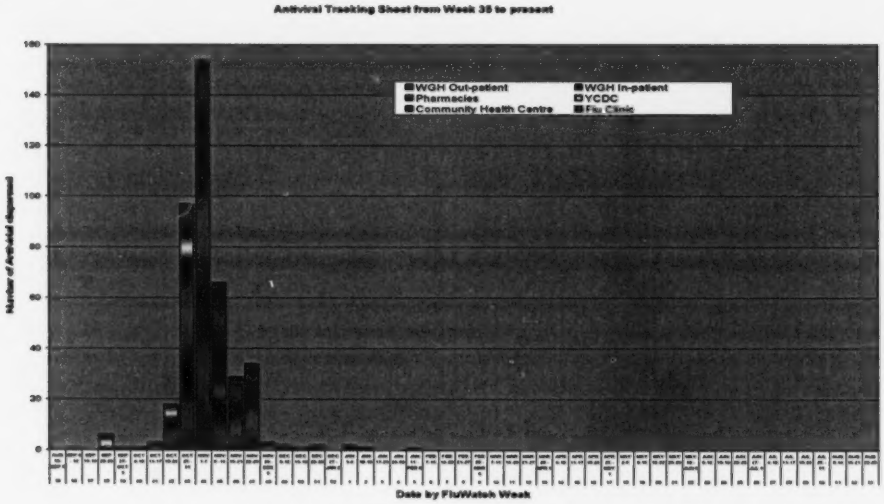
Percentage with ILI, visits to sentinels by week



*2008/09 weeks are slightly different than those shown (following the Sun-Sat weekly pattern).

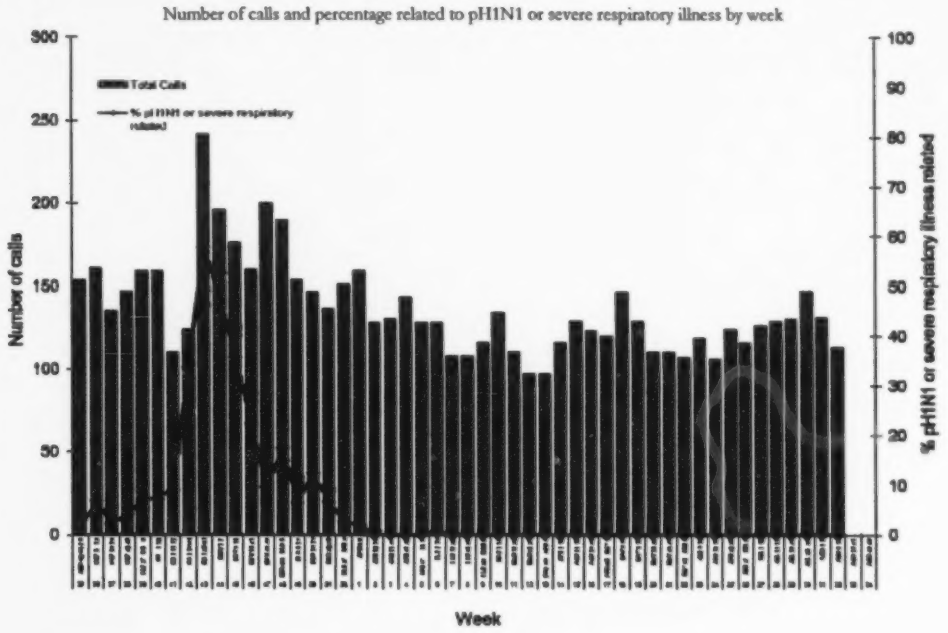
Antiviral Prescriptions/Dispensing

Antiviral prescriptions have decreased since week 45. Antiviral have not been distributed since week 5 (Jan 31 - Feb 6, 2010)



HealthLink 811

The graph below shows the percentage of calls related to Influenza A pH1N1 or severe respiratory illness.


Number of calls and percentage related to pH1N1 or severe respiratory illness by week
Total Calls
% pH1N1 or severe respiratory related
Number of calls
% pH1N1 or severe respiratory illness related
Week

Outbreaks

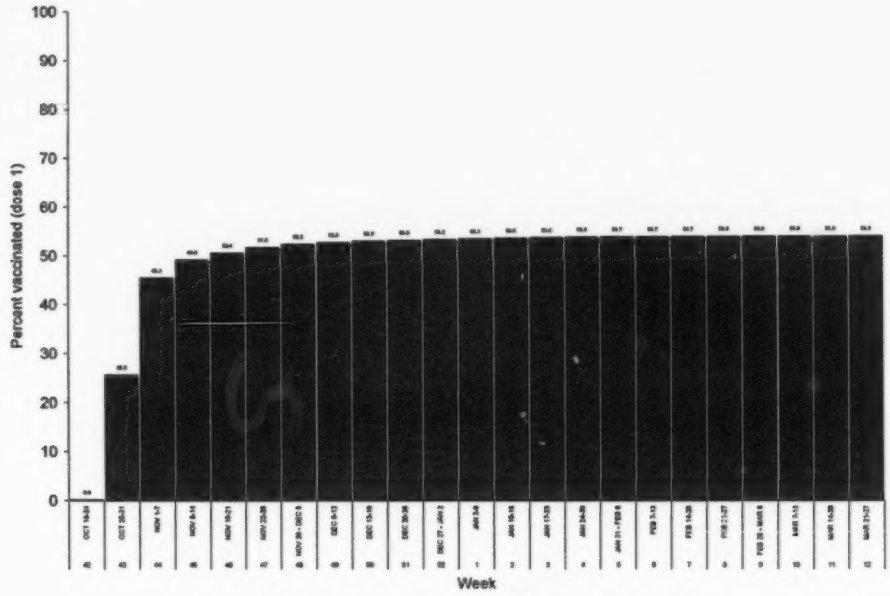
No facility outbreaks have been reported since week 43 (Oct 25 - 31, 2009). On October 29th, 2009 (during week 43) YCDC was notified of an influenza outbreak within the Whitehorse Correctional facility. The outbreak was contained to fewer than 10 residents who developed symptoms during their stay at the facility or who exhibited symptoms of influenza upon admission. Causative organism of the outbreak was identified as pH1N1. This outbreak was declared over on November 16th, 2009

Schools

There have been no reports of high absenteeism in schools since week 45 (Nov 8 - 14, 2009).

Immunization

The percentage of the population vaccinated with one dose against influenza A pH1N1 reached 53.8% in week 8. The age groups with the highest proportions vaccinated (dose 1) are those 6 months to 4 years and those 65 year or older. Vaccine administration is on going, however, due to low volume of continued vaccine uptake, this section will no longer be updated on a monthly basis.



Proportion of population vaccinated, dose 1, by week in the Yukon Territory

Age group	% Vaccinated
6 mo - 4 years	70.3
5-18 years	56.3
19-29 years	36.5
30-39 years	51.8
40-64 years	55.6
65+ years	68.9
TOTAL	53.8

*Data provided by the Community Nursing Vaccination Program.

Adverse Events Following Immunization

Of 18 400, doses administered from October 26 to March 27, 2010, 33 adverse events following immunization have been reported. The types of reports include both local and allergic reactions. None of the events fit the criteria for serious adverse events, and none required hospitalization.

Obtained from: FluWatch – Public Health Agency of Canada
August 1 to August 14, 2010 (Weeks 31 & 32)
http://origin.phac-aspc.gc.ca/fluwatch/09-10/w32_10/pdf/fw2010-32-eng.pdf

Summary of FluWatch Findings for the

Week ending August 14, 2010

Overall influenza activity in Canada remained very low with most of the influenza surveillance regions having reported no activity and no influenza outbreaks since March 2010.
Only two specimens (out of 1,440) tested positive for influenza in weeks 31-32. The two positive specimens were reported as unsubtyped influenza A (BC and QC). The proportion of positive parainfluenza tests (4.4% and 6.6%) remained high compared to the other respiratory viruses and was at a level similar to the previous years.
On August 11, 2010, the World Health Organization declared that the world is no longer in phase 6 of pandemic influenza and has moved into the post-pandemic period. However, the influenza H1N1 2009 transmission remained locally intense in parts of India and New Zealand.

Canadian situation

Paediatric Influenza Hospitalizations and Deaths

In weeks 31-32 no laboratory-confirmed influenza-associated paediatric (18 years of age and under) hospitalizations were reported through the Immunization Monitoring Program Active (IMPACT) network. Since the beginning of the 2009-2010 influenza season (30 August, 2009), 952 hospitalizations have been reported, of which 97.7% were due to pandemic H1N1 2009. The last hospitalized case was reported during week 15 with pandemic H1N1 2009. Please note that delays in the reporting of data may cause data to change retrospectively.

Adult Influenza Hospitalizations and Deaths

During weeks 31 and 32, no new laboratory-confirmed influenza-associated adult (16 years of age and older) hospitalizations were reported through the Canadian Nosocomial Infection Surveillance Program (CNISP) from 9 reporting sites in week 31 and 11 in week 32. From November 22, 2009 to May 22, 2010, 57 laboratory-confirmed influenza cases among hospitalized adults (16 years of age and older) were reported through the Canadian Nosocomial Infection Surveillance Program (CNISP) sentinel sites. The last hospitalized case was reported during week 1 with pandemic H1N1 2009. Please note the total number of CNISP reporting sites fluctuates weekly and most of the reporting sites started surveillance in late fall 2009.

Sale of antivirals (AV)

During weeks 31 and 32, little change in antiviral prescription sales were observed among provinces and territories. Daily and weekly antiviral data at the Health Region level demonstrated low antiviral prescription rates among all Health Regions for the report weeks. All the antivirals sold from participating retail pharmacy chains and stores during the past two weeks were Tamiflu. At the national level, the rise in respiratory-related over-the-counter transactions which began during week 31 appears to have leveled-off. Several provinces and territories appear to be driving this recent trend. Interestingly, respiratory-related OTCs began to increase last year at this same time.

Antigenic Characterization

Since September 1, 2009, the National Microbiology Laboratory (NML) has antigenically characterized 858 (98.1%) influenza A/H1N1, 10 (1.1%) influenza A/H3N2 and 7 (0.8%) influenza B viruses that were received from provincial laboratories. Of the 858 pandemic H1N1 2009 viruses characterized, 855 (99.7%) were antigenically related to A/California/7/2009, which is the pandemic reference virus selected by WHO for the pandemic H1N1 2009 vaccine and three (0.3%) were A/Brisbane/59/2007-like. Four viruses (0.5%) tested showed reduced titer with antisera produced against A/California/7/09. Of the 10 influenza A/H3N2 viruses characterized, two were related to A/Brisbane/10/07 (2009-10 vaccine) and eight viruses were antigenically related to A/Perth/16/09 (2010-2011 Northern Hemisphere vaccine). Of the 7 influenza B viruses characterized, 5 were antigenically related to B/Brisbane/60/08 (2009-10 vaccine), one was antigenically similar to B/Malaysia/2506/2004 and one was related to the previous vaccine virus B/Florida/4/2006.

Antiviral Resistance

Since August 30, 2009, 12 cases of oseltamivir resistant pandemic H1N1 2009 were reported to date in Canada while one was reported in the 2008-2009 influenza season. The last two cases were reported during week 5. All resistant cases were associated with oseltamivir treatment or prophylaxis.

International influenza update

Global information

WHO: The World Health Organization declared on August 11, 2010 that the world is no longer in phase 6 of influenza pandemic alert and has moved into the post-pandemic period. However, the influenza H1N1 2009 transmission remained locally intense in parts of India and New Zealand. Seasonal influenza A/H3N2 viruses have recently circulated in the tropics of the Americas (particularly in several Central American countries), in southern and western Africa, and in parts of Southeast Asia. The most active areas of influenza type B virus circulation continue to be in parts of central and southern Africa.
http://www.who.int/mediacentre/news/statements/2010/h1n1_vpc_20100810/en/index.html
http://www.who.int/csr/don/2010_08_13/en/index.html

Geographic update

Southern hemisphere

Australia: In Australia, the levels of influenza-like illness (ILI) in the community continued to show signs of increasing. The notifications of laboratory confirmed influenza continue to increase, indicating the start of the influenza season. There have been 115 laboratory confirmed notifications of influenza during this week 31, including 67 (58.3%) pandemic H1N1 2009 cases.
http://www.healthemergency.gov.au/internet/healthemergency/publishing.nsf/Content/ozflu2010-jul-sep-pdf-cnt.htm/$File/ozflu-no31-2010.pdf

New Zealand: The national ILI consultation rate was 143.8 per 100 000 consultations during week 32 which is above the baseline level. A total of 131 swabs were received by virology laboratories from sentinel surveillance. Of these, 56 (42.7%) influenza viruses were identified: pandemic H1N1 2009 (30.5%) and A (not sub-typed) (12.2%). Nationally, overall rates of ILI and numbers of severe and fatal cases remained well below levels seen during the winter 2009 pandemic wave, however, the situation continues to evolve and the current epidemic has yet to peak.
http://www.who.int/csr/don/2010_08_13/en/index.html
http://www.surv.esr.cri.nz/PDF_surveillance/Virology/FluWeekRpt/2010/FluWeekRpt201032.pdf

Northern hemisphere

India: In India, the number of new H1N1 (2009) cases per week, including fatal cases, continued to increase since mid June 2010 in several states. Overall, 79 new laboratory confirmed H1N1 (2009) associated deaths were officially reported across India during the week of August 2-8. Seasonal influenza B viruses are also known to be currently circulating in India, although at lower levels than H1N1 (2009) viruses.
http://www.who.int/csr/don/2010_08_13/en/index.html

United States: No further influenza surveillance reports will be published by the CDC for the 2009-2010 influenza season (last report was in week 20). The next report will be for week 40 (week ending October 9, 2010) during the 2010-2011 influenza season.
http://www.cdc.gov/flu/weekly/index.htm

Europe: During weeks 30 and 31, epidemiological indicators did not show any influenza activity in 19 reporting countries. Influenza B and A/H3N2 viruses were sporadically detected in sentinel and non-sentinel specimens during weeks 30–31/2010.
http://ecdc.europa.eu/en/publications/Publications/100813_SUR_Biweekly_Influenza_Surveillance_Overview.pdf

Pandemic H1N1 Influenza Web Sites

Yukon H&SS	*www.hss.gov.yk.ca/*
PHAC:	*www.phac-aspc.gc.ca/alert-alerte/swine_200904-eng.php*
BCCDC:	*www.bccdc.ca/dis-cond/a-z/_h/HumanSwineFlu/default.htm*
BCCDC:	*www.health.gov.bc.ca/pandemic/response/index.html*
US CDC:	*www.cdc.gov/swineflu/index.htm*
WHO:	*www.who.int/csr/disease/swineflu/en/index.html*

Acronyms

ILI:	Influenza-Like Illness
pH1N1:	Pandemic H1N1 influenza or swine origin influenza
WHO:	World Health Organization

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